In the Claims:

1. (Currently Amended) An apparatus for filtering and amplifying a received signal that includes a desired signal portion embedded in an interfering signal portion comprising:

a plurality of sequentially connected complex filter/amplifier stages, each stage having:

- a complex filter for attenuating [[the]] an interfering signal portion relative to [[the]] a desired signal portion of [[the]] a ~~received~~ signal received by the complex filter;

- a controlled amplifier having set minimum gain K_{min} and maximum gain K_{max} for amplifying the desired signal portion and the interfering signal portion of the signal received ~~signal~~ from the complex filter; and

- a control circuit for controlling the gain K of the controlled amplifier in the complex filter/amplifier stage where $K_{min} \leq K \leq K_{max}$ such that the controlled amplifier seeks to generate the desired signal having a projected amplitude level at the controlled amplifier output, wherein the apparatus provides the desired signal at a predetermined signal level at the apparatus output as a result of ~~the combined gains~~ a total gain of the controlled amplifiers of the plurality of the complex filters/amplifier stages.

2. (Previously Presented) An apparatus as claimed in claim 1 wherein the received signal is in the IF band.

3. (Previously Presented) An apparatus as claimed in claim 2 wherein the received signal is at a low intermediate frequency (LIF).

4. (Previously Presented) An apparatus as claimed in claim 2 wherein the received signal is at a substantially zero intermediate frequency (ZIF).

5. (Previously Presented) An apparatus as claimed in claim 1 wherein in each of the complex filter/amplifier stages, the complex bandpass filter filters the received signal and the controlled amplifier is connected to the filter to amplify the filtered received signal.

6. (Previously Presented) An apparatus as claimed in claim 1 wherein the received signal comprises complex in-phase I and quadrature phase Q signals.

7. (Previously Presented) An apparatus as claimed in claim 6 wherein each of the complex filter includes up to two poles.

8. (Previously Presented) An apparatus as claimed in claim 6 wherein each of the complex filters comprises one or more single pole complex filters connected in series.

9. (Currently Amended) An apparatus as claimed in claim 6 wherein each of the controlled amplifiers comprises:

- a first variable gain amplifier for amplifying the in-phase I signal; and

- a second variable gain amplifier for amplifying the quadrature phase Q signal, wherein the control ~~means~~ circuit generates a gain control signal for controlling the gain of the first and second amplifiers.

10. (Previously Presented) An apparatus as claimed in claim 9 wherein the control circuit determines the control signal as a function of the I and Q inputs to the amplifiers.

11. (Previously Presented) An apparatus as claimed in claim 9 wherein the control circuit determines the control signal as a function of the I and Q outputs of the amplifiers.

12. (Previously Presented) An apparatus as claimed in claim 9 wherein the control circuit determines the control signal as a function of the projected amplitude level.

13. (Previously Presented) An apparatus as claimed in claim 9 wherein the control circuit comprises:

- a first rectifier for receiving the output of the first variable gain amplifier to provide a first rectified signal;

- a second rectifier for receiving the output of the second variable gain amplifier to provide a second rectified signal;

- an adder for adding the first and the second rectified signals; and

- an error amplifier having a first input coupled to the adder and a second input coupled to a projected amplitude level signal for producing the gain control signal.

14. (Previously Presented) An apparatus as claimed in claim 13 wherein the first and second rectifiers are full wave rectifiers.

15. (Previously Presented) An apparatus as claimed in claim 9 wherein the control circuit comprises:

- a first rectifier for receiving the input of the first variable gain amplifier to provide a first rectified signal;

- a second rectifier for receiving the input of the second variable gain amplifier to provide a second rectified signal;

- an adder to add the first and the second rectified signals; and

- an error amplifier having a first input coupled to the adder and a second input coupled to a projected amplitude level signal for producing the gain control signal.

16. (Previously Presented) An apparatus as claimed in claim 15 wherein the first and second rectifiers are full wave rectifiers.

17. (Previously Presented) An apparatus as claimed in claim 9 further comprising:

a received signal strength indicator having:

- a gain summation circuit for receiving the gain control signal from each of the complex filter/amplifier stages for computing the overall gain of the apparatus;

- a detector for detecting the amplitude of the apparatus output signal; and

- a circuit coupled to the gain summation circuit and the detector for indicating the strength of a desired signal received by the apparatus.

18. (Previously Presented) An apparatus as claimed in claim 1 wherein each complex filter/amplifier stage further includes a dc compensation circuit for attenuating the dc offset of the received signal.

19. (Previously Presented) An apparatus as claimed in claim 18 wherein the dc compensation circuit is a feedback circuit.

20. (Previously Presented) An apparatus as claimed in claim 18 wherein the dc compensation circuit is a feedforward circuit.

21. (Previously Presented) An apparatus as claimed in claim 1 wherein K_{min} is negative.

22. (Currently Amended) An apparatus for filtering and amplifying a complex in-phase I and quadrature phase Q received signals, comprising a plurality of sequentially connected complex filter/amplifier stages, each stage having:

- complex filter means for attenuating an interfering portion relative to a desired portion of [[the]] ~~received~~ signals <u>received by the complex filter means</u>;

- controlled amplifier means having set minimum gain K_{min} and maximum gain K_{max} for amplifying the <u>signals</u> received ~~signal~~ <u>from the complex filter means</u>, the controlled amplifier means comprising:
  - a first variable gain amplifier for amplifying the in-phase I signal; and

- a second variable gain amplifier for amplifying the quadrature phase Q signal; and[.],

- control means for generating a gain control signal for controlling the gain K of the first and second amplifiers where $K_{min} \leq K \leq K_{max}$ such that the controlled amplifiers seek to generate output signals having a projected amplitude level, wherein the control means comprises:
  - a first rectifier for receiving the output of the first variable amplifier to provide a first rectified signal;
  - a second rectifier for receiving the output of the second variable amplifier to provide a second rectified signal;
  - summing means for adding the first and the second rectified signals; and
  - error amplifier means having a first input coupled to the summing means and a second input coupled to a projected amplitude level signal for producing the gain control signal.

23. (Previously Presented) An apparatus as claimed in claim 22 wherein the first and second rectifiers are full wave rectifiers.

24. (Currently Amended) An apparatus for filtering and amplifying a complex in-phase I and quadrature phase Q received signals, comprising a plurality of sequentially connected complex filter/amplifier stages, each stage having:

- complex filter means for attenuating an interfering portion relative to a desired portion of [[the]] ~~received~~ signals <u>received by the complex filter means</u>;

- controlled amplifier means having set minimum gain K_{min} and maximum gain K_{max} for amplifying the <u>signals</u> received ~~signal~~ <u>from</u>

the complex filter means, the controlled amplifier means comprising:

- a first variable gain amplifier for amplifying the in-phase I signal; and
- a second variable gain amplifier for amplifying the quadrature phase Q signal; and[.],

- control means for generating a gain control signal for controlling the gain K of the first and second amplifiers where $K_{min} \leq K \leq K_{max}$ such that the controlled amplifiers seek to generate output signals having a projected amplitude level, wherein the control means comprises:
  - a first rectifier for receiving the input of the first variable amplifier to provide a first rectified signal;
  - a second rectifier for receiving the input of the second variable amplifier to provide a second rectified signal;
  - summing means for adding the first and the second rectified signals; and
  - error amplifier means having a first input coupled to the summing means and a second input coupled to a projected amplitude level signal for producing the gain control signal.

25. (Previously Presented) An apparatus as claimed in claim 24 wherein the first and second rectifiers are full wave rectifiers.

26. (Currently Amended) An apparatus for filtering and amplifying a complex in-phase I and quadrature phase Q received signals, comprising a plurality of sequentially connected complex filter/amplifier stages, each stage having:

- complex filter means for attenuating an interfering portion relative to a desired portion of [[the]] ~~received~~ signals <u>received by the complex filter means</u>;

- controlled amplifier means having set minimum gain K_{min} and maximum gain K_{max} for amplifying the <u>signals</u> received ~~signal~~ <u>from the complex filter means</u>, the controlled amplifier means comprising:
  - a first variable gain amplifier for amplifying the in-phase I signal; and
  - a second variable gain amplifier for amplifying the quadrature phase Q signal;

- control means for generating a gain control signal for controlling the gain K of the first and second amplifiers where $K_{min} \leq K \leq K_{max}$ such that the controlled amplifiers seek to generate output signals having a projected amplitude level; and

- a received signal strength indicator comprising:
  - gain summation means for receiving the gain control signal from each of the complex filter/amplifier stages for computing the overall gain of the apparatus;
  - means for detecting the amplitude of the apparatus output signal; and
  - means coupled to the gain summation means and the detector means for indicating the strength of a desired signal received by the apparatus.

27. (Previously Presented) An apparatus as claimed in claim 22 wherein K_{min} is negative.